L'exemplaire filmé fut reproduit grâce à la générosité de:

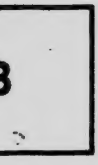
Bibliothèque
Agriculture Canada

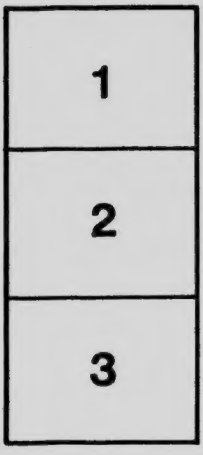
Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

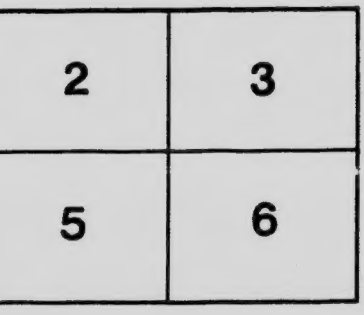
Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole → signifie "A SUIVRE", le symbole ∇ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.







Agricultural Department Circular bulletin No. 16.

PROVINCE OF BRITISH COLUMBIA.

DEPARTMENT OF AGRICULTURE
(LIVE STOCK BRANCH SOIL AND CROP DIVISION).

Clover and Alfalfa Seed Production in British Columbia.

Some Preliminary Conclusions drawn from Results in 1916, together with Rules and Regulations for 1917.

By H. O. English, Chief Soil and Crop Instructor.

STATISTICS show us that during the year ending March 31st, 1915, the value of clover and other grass seeds imported into Canada was $1,051,881. In addition to this initial outlay should be added a general duty of 10 per cent., or $191,968.28, and the middlemen's profit, which may be estimated, but cannot be determined. All this comes from the farmers' pockets who purchase the seed. According to the same report, Eastern Canada exports each year large quantities of clover-seed, while importing other grass-seeds. This report shows that the seed imported consists mostly of three kinds—i.e., alfalfa-seed from the Western States and Europe, white Dutch clover from the Western States to Western Canada and from Euro to Eastern Canada, and timothy-seed from the United States, mostly from a district within a 250-mile radius of Chicago. In addition, there are the importations of the seed of other grasses equally adapted to our conditions, all the seed of which is imported.

Since our conditions are almost identical with those existing in the Western States to the south of us, why shouldn't we produce the seed which is being produced by our neighbours to the south, and thus save to the farmers of this Province the returns which are rightfully theirs?

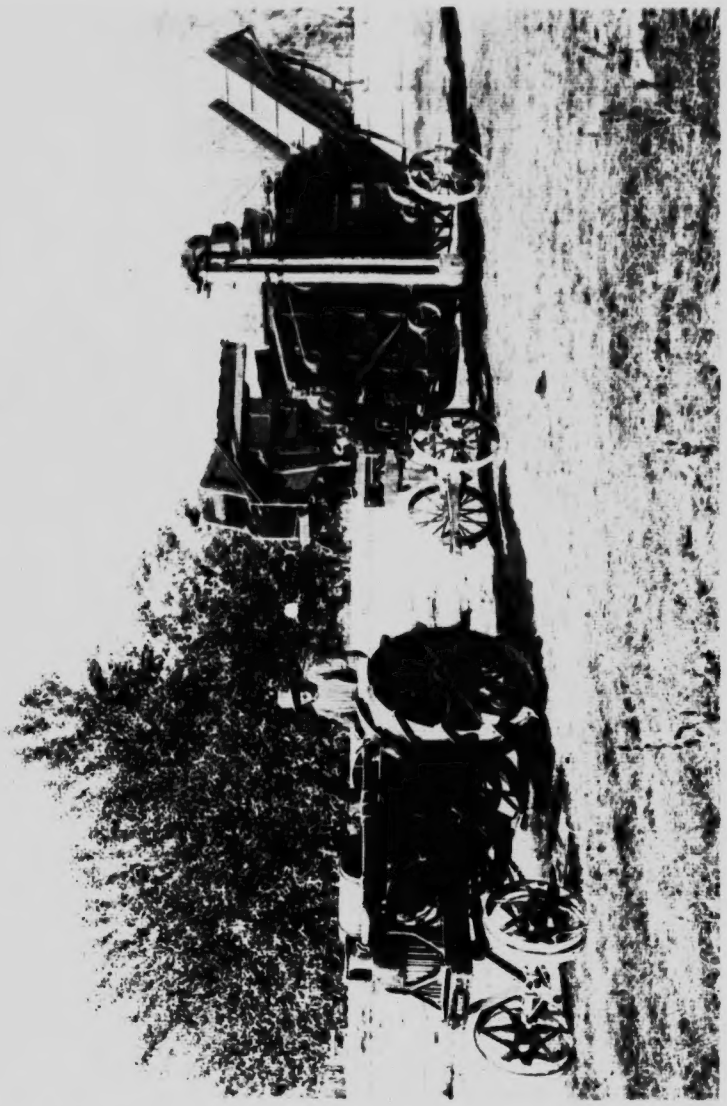
Like many other branches of the farming industry, clover- and alfalfa-see production "on paper" will give remarkable returns without impoverishing the lan or entailing much extra labour. But in actual farm practice, to make money growing seed of these crops, one requires an intimate knowledge of the best method of culture, care, and handling of same, which knowledge is best gained by actual experience.

It is in this connection that the Department clover and alfalfa huller is playing, and should in the future play, an important part, in that it relieves the growers of the grass-seed of the necessity of spending a large sum of money to obtain the machinery for the threshing of the crop.

GENERAL CONCLUSIONS.

Although the machine was not purchased until July, 1916, and in consequence the experimental value of work accomplished limited, we believe that, even so, we may now safely draw a few general conclusions.

First: The clover or alfalfa hay-field which has been seeded down for a number of years, and on which the stand is getting a little thin for hay production, is the



The Department's clover and alfalfa huller.

best kind of field for seed production. As a simple deduction from this, we may conclude that if the field were thinly seeded in rows a heavier yield of seed would be obtained. Such has been proven in the neighbouring States to the south.

Second: Should unfavourable weather conditions prevail during the blossoming period—i.e., either heavy rains or extremely hot, dry weather—the crop may be cut for hay and little loss sustained. The same may be said should an early autumn

frost damage the late-maturing seed-crop. A number of those who were attempting to save seed from the second crop of alfalfa in 1916 were forced by frost to harvest their crop for hay, and have reported a satisfactory quality of hay.

Third: A dirty hay-crop which has a liberal sprinkling of wild oats, stinkweed, or even a mixture of different varieties of clover or alfalfa, is better cut for hay than allowed to go to seed.

Fourth: Where a farmer is seeding down 10 to 15 acres of clover or alfalfa per year, it pays to save an acre or two of the hay-crop for seed purposes. In this way a number of the neighbours may club together and make it worth while for the machine to set on one of the centrally located farms.

Fifth: A little extra care and a little previous experience make considerable difference in the yield of seed obtained and the purity.

Sixth: In the Northern Okanagan the second cutting of alfalfa was no seed-crop in 1916. Further experiments will be conducted before condemning this crop.

Seventh: The pasturing of the prospective seed-crop for a few weeks in the spring or the cutting of the first crop early, to force the second crop to earlier maturity, are remedies recommended.

Eighth: Wherever possible, the common binder should be used to harvest, as this facilitates the curing and threshing of the crop.

The machine was operated on twenty-five or thirty experimental plots in 1916, and on three kinds of crop. Alfalfa, red clover, and sweet clover were threshed. The yields varied from a few pounds to about 200 lb. of seed per acre, while climatic conditions last year were not considered suitable for heavy seed production.

While the machine was operated during 1916 on some plots which gave very little return, the Department does not consider that time was wasted in this connection, as the demonstration thus afforded would show the grower the foolishness of saving such crops for seed.

It is hoped that in 1917 some farmers may save, and experiment with, seed-plots of alsike, crimson, and white Dutch clovers. It is also hoped that experimental work in clover-hulling may extend to other parts of the Province, and the Department wishes it understood that the demonstration clover and alfalfa huller will thresh other kinds of grass-seeds in addition to clover and alfalfa. Thus any farmer in districts likely to be visited by the machine, wishing to experiment in grass-seed production, need not worry as to how he will get the same threshed.

RULES AND REGULATIONS.

(1.) The Department clover and alfalfa huller will be operated by the Department in the West Kootenay, Okanagan Districts during 1917.

(2.) The Department clover and alfalfa huller will operate in other districts where the crop of clover, alfalfa harvested for seed, is sufficiently large to warrant the shipping of the machine to same.

(3.) The Department clover and alfalfa huller will be operated on crops belonging to members of Farmers' Institutes in districts where such institutes have been organized, or, at the discretion of the Department, in other districts.

(4.) Application forms are supplied upon request, which should be filled in by the farmer wishing to have his clover or alfalfa seed-crop threshed. These should be made out and returned as soon as possible, in order that the machine may be used upon a maximum number of plots this year.

(5.) In districts other than those mentioned above, should the farmers desire to avail themselves of the use of this machine, they should get together at an early date and ascertain the exact acreage available and the suitability of same for seed production.

(6.) All applications and inquiries re clover and alfalfa hulling should be addressed to the Chief Soil and Crop Instructor, Department of Agriculture, Victoria, B.C. Application forms should be mailed prior to May 31st, to enable the Chief Soil and Crop Instructor to arrange for the inspection of the fields in question before haying-time.

(7.) A charge of $1 per bushel of seed threshed will be levied.

(8.) Applicants must provide board and lodging free for the Department's representative while the huller is at applicant's farm.

(9.) The Department reserves the right to decide what demonstrations shall or shall not be conducted with the Department's machine.

(10.) Applicants must provide at least two assistants and such additional assistance as may be necessary to bring the seed-crop to the machine.

(11.) The threshing will be done at the discretion of the Department.

For further particulars re the use of the demonstration clover and alfalfa huller, write to the Chief Soil and Crop Instructor, Department of Agriculture, Victoria, B.C.

VICTORIA, B.C.:
Printed by WILLIAM H. CULLIN, Printer to the King's Most Excellent Majesty.
1917.